

Title (en)  
MONOLITIC INPUT STAGE FOR AN OPTICAL RECEIVER

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Application  
**EP 82105539 A 19820624**

Priority  
DE 3135462 A 19810908

Abstract (en)  
[origin: US4490735A] The present invention relates to a monolithically designed input stage for an optical receiver, the input stage comprising a PIN (more specifically a PNIN) photodiode and a connected field effect transistor. The photodiode, which includes an absorption zone of GaInAsP for the optical radiation and a pn-junction formed by InP layers, is disposed together with the field effect transistor on a common semi-insulating InP substrate.

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IPC 8 full level  
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**H01L 27/1443** (2013.01 - EP US); **H01L 31/105** (2013.01 - EP US); **H01L 31/109** (2013.01 - EP US)

Citation (search report)  
• [A] US 3761326 A 19730925 - WECKLER G  
• [A] PATENTS ABSTRACTS OF JAPAN, Band 5, Nr. 145 (E-74)[817], 12. September 1981; & JP - A - 56 80 179 (NIPPON DENKI K.K.) 01-07-1981  
• [A] ELECTRONICS LETTERS, Band 16, Nr. 23, 6. November 1980, Seiten 893-895, London, GB; F. CAPASSO u.a.: "InGaAsP/InGaAs heterojunction p-i-n detectors with low dark current and small capacitance for 1.3-1.6 mum fibre optic systems  
• [A] ELECTRONICS LETTERS, Band 16, Nr. 10, 8. Mai 1980, Seiten 353-355, London, GB; R.F. LEHENY u.a.: "Integrated In<sub>0.53</sub>Ga<sub>0.47</sub>As p-i-n F.E.T. photoreceiver"  
• [A] ELECTRONICS LETTERS, Band 15, Nr. 20, 27. September 1979, Seiten 655-657, London, GB; C. BURRUS u.a.: "InGaAsP p-i-n photodiodes with low dark current and small capacitance"

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